

WHAT IS CLAIMED IS:

1. A front derailleur for a bicycle comprising:
  - a fixed member having a mounting portion configured to be coupled to a frame portion of the bicycle, said fixed member including a first mounting flange and
  - 5 a second mounting flange axially spaced from said first mounting flange;
  - a chain guide having a chain receiving slot to shift a chain of the bicycle in a transverse direction; and
  - a linkage assembly coupled between said chain guide and said fixed member to move said chain guide between a retracted position and an extended position; said
  - 10 linkage assembly including
    - a first link pivotally coupled to said fixed member at a first pivot point for rotation about a first pivot axis,
    - a second link pivotally coupled to said first and second mounting flanges for rotation about a second pivot axis passing through said first and
    - 15 second mounting flanges that is substantially parallel to said first pivot axis, and
    - a third link coupled to said chain guide and movably coupled to said first and second links to form a four-bar linkage together with said fixed member,
  - 20 said first and second mounting flanges having different axial widths, as measured along said second pivot axis.
2. The front derailleur according to claim 1, wherein
  - said fixed member is configured with said first pivot axis being spaced less
  - 25 than about 5.0 millimeters from a center plane of the frame portion, measured perpendicular to said first pivot axis.
3. The front derailleur according to claim 2, wherein
  - said second link has a longitudinal dimension measured along said second
  - 30 pivot axis that is at least about 45.0 millimeters in length.

4. The front derailleur according to claim 3, wherein  
said first link has a cable attachment point adapted to fixedly couple a control  
element thereto.

5 5. The front derailleur according to claim 4, wherein  
said linkage assembly includes a biasing member normally urging said chain  
guide to one of said retracted and extended positions.

10 6. The front derailleur according to claim 5, wherein  
said fixed member is a tubular clamping member.

7. The front derailleur according to claim 3, wherein  
said axial width of said first mounting flange is at least about five times  
thicker than said axial width of said second mounting flange with said first mounting  
15 flange being at least partially aligned with said first link in a direction perpendicular  
to said first and second pivot axes.

8. The front derailleur according to claim 7, wherein  
said first mounting flange is at least about 21 millimeters thick, as measured  
20 along said second pivot axis.

9. The front derailleur according to claim 1, wherein  
said first mounting flange extends axially along said second pivot axis away  
from said mounting portion of said fixed member to form a first link receiving recess  
25 between said first mounting flange and said mounting portion of said fixed member  
such that said first link is at least partially disposed in said first link receiving recess  
to be at least partially aligned with said first mounting flange in a direction  
perpendicular to said first and second pivot axes.

30 10. The front derailleur according to claim 9, wherein  
said first link includes a link attachment portion that is axially disposed  
between said third link and said fixed member, relative to said first pivot axis.

11. The front derailleur according to claim 1, wherein  
said axial width of said first mounting flange is at least about five times  
thicker than said axial width of said second mounting flange with said first mounting  
5 flange being at least partially aligned with said first link in a direction perpendicular  
to said first and second pivot axes.

12. A front derailleur for a bicycle comprising:  
a fixed member having a mounting portion configured to be coupled to a  
10 frame portion of the bicycle, said fixed member including a first mounting flange and  
a second mounting flange axially spaced from said first mounting flange;  
a chain guide having a chain receiving slot to shift a chain of the bicycle in a  
transverse direction; and  
a linkage assembly coupled between said chain guide and said fixed member  
15 to move said chain guide between a retracted position and an extended position; said  
linkage assembly including  
a first link pivotally coupled to said fixed member at a first pivot point  
for rotation about a first pivot axis,  
a second link pivotally coupled to said first and second mounting flanges  
20 for rotation about a second pivot axis passing through said first and  
second mounting flanges that is substantially parallel to said first  
pivot axis, said second link having a longitudinal dimension  
measured along said second pivot axis that is at least about 45.0  
millimeters in length, and  
25 a third link coupled to said chain guide and movably coupled to said first  
and second links to form a four-bar linkage together with said fixed  
member.

13. The front derailleur according to claim 12, wherein  
30 said fixed member is configured with said first pivot axis being spaced less  
than about 5.0 millimeters from a center plane of the frame portion, measured  
perpendicular to said first pivot axis.

14. The front derailleur according to claim 12, wherein  
said first and second mounting flanges have different axial widths, as  
measured along said second pivot axis.

5

15. The front derailleur according to claim 14, wherein  
said axial width of said first mounting flange is at least about five times  
thicker than said axial width of said second mounting flange with said first mounting  
flange being at least partially aligned with said first link in a direction perpendicular  
to said first and second pivot axes.

10

16. The front derailleur according to claim 15, wherein  
said first mounting flange is at least about 21 millimeters thick, as measured  
along said second pivot axis.

15

17. The front derailleur according to claim 15, wherein  
said first link has a cable attachment point adapted to fixedly couple a control  
element thereto.

20

18. The front derailleur according to claim 17, wherein  
said linkage assembly includes a biasing member normally urging said chain  
guide to one of said retracted and extended positions.

25

19. The front derailleur according to claim 18, wherein  
said fixed member is a tubular clamping member.

30

20. The front derailleur according to claim 12, wherein  
said first mounting flange extends axially along said second pivot axis away  
from said mounting portion of said fixed member to form a first link receiving recess  
between said first mounting flange and said mounting portion of said fixed member  
such that said first link is at least partially disposed in said first link receiving recess

to be at least partially aligned with said first mounting flange in a direction perpendicular to said first and second pivot axes.

21. The front derailleur according to claim 20, wherein
- 5        said first link includes a link attachment portion that is axially disposed between said third link and said fixed member, relative to said first pivot axis.